

greater division, of its own, and is represented through the Old World tropics. In Africa we have certainly two species, *A. depressus* described from the West Coast by Palisot de Beauvois in 1805, and *A. murrayi*, Dohrn, a smaller species very close to it. They are remarkable insects as flat as a piece of paper, and with several peculiar structural features, and are very specialised for life under the bark of trees; they are very active, as are all earwigs, and with their sickle-shaped forceps even the nymphs can give a nip that the human finger can appreciate and they must be quite formidable to small insects; probably they feed on the termites that infest rotting timber in such vast quantities. Of these two African species, *A. murrayi* appears to be confined to the equatorial forest area, but *A. depressus* extends further up the West Coast to the north west and right into the eastern and southern portion of the continent. I used to consider the former as a mere diminutive geographical race of the latter, but Rehn has decided on its specific distinction. It is noteworthy that this diminutive form is restricted to the West Coast, where dwarfed forms of hippopotamus, buffalo, elephant and man occur.

One evening I found an earwig crawling on my hand and was delighted to think that at last I had made the personal acquaintance of one of the strange *Diplatyidae*, about which in the old days I had written a good deal. A closer inspection showed that it was certainly a very strange Diplatyid, and at last I realised that it was a Staphylinid beetle (*Cryptolinum africanum*, Frm.,) and not an earwig at all. And so I was just as disappointed as with the *Mantispa*.

(To be continued.)

Miscellaneous Notes from Argentina.

X. ANTS IN FLOODED AREAS.

By KENNETH J. HAYWARD, F.E.S.

It has for some time been a mystery to me how it was that ants were always to be found in such vast numbers in the esteros, tracts of low-lying reed, or grass-covered areas, that become vast inundated marshes after heavy rains. That the inhabitants of the thousands of ant-hills retired to the top of their nests had to be ruled out, as for the greater part the mounds are completely submerged during the summer months after the spring and early summer rains, and it was clearly impossible that the ants could retire to the higher land, at any rate from the greater part of the area, as the esteros become inundated very quickly, often in a few hours, when rain is heavy. A possible explanation of the speedy repopulation of these marshes when they again dry was revealed to me when duck-shooting during February of this year (1928) in the estero Mocoví. The water was from two to two and a half feet deep on the average, and all ground and ant-hills were totally submerged. I early on noticed patches of brown clinging to reeds and water weeds above water level, and thinking them dead vegetation took no further interest till late in the afternoon I passed close to one, and to my surprise found it a seething mass of small red ants. The insects were balled up on the plant stalks sometimes on a single stalk, more often they had chosen a spot where several reeds

grew close together. The "balls" varied in size from that of a marble to larger than a tennis ball, sometimes a single ball, more often several close together. The ants were in continual movement, and amongst some of the balls I broke up were larvae of some coccinellid and one or two very small unidentified beetles. Winged males and females were present in one or two cases, and as the estero in question had been inundated for at least two months, this seems strange. I at first thought the ants had taken advantage of spiders' or other webs on which to ball up, but in every case the ants were simply clinging one to another, those on the reed stems bearing the weight of the whole surviving colony. Since the date of this discovery I have noticed the same thing in many other marshes when shooting, and in it I see a possible explanation to what had previously puzzled me. Presumably the ants, who have thus escaped drowning, are able to maintain life until the waters subside, when they re-occupy and re-condition their old nest, and carry on the colony.

Some Aberrations of Coleoptera not previously recorded for Britain.

By HORACE DONISTHORPE, F.Z.S., F.E.S., etc.

Philonthus albipes, Gr., ab. *alpinus*, Epp.—In this aberration the legs are nearly black or, at any rate, dark brown in colour, which is, of course, very misleading. Moreover, as *P. albipes* should come into the second division of the species with thorax consisting of four punctures, *i.e.*, those in which the first joint of posterior tarsi is not, or hardly, longer than the last, and not as long as the three following united, instead of in the first division as stated by Fowler, it was quite impossible to identify dark legged-specimens. I am indebted to Colonel Deville for the name. This ab. occurred sparingly, in company with the typical form, in manure heaps in Windsor Forest on May 3rd, 31st, and subsequent dates in 1927.

Mycetophagus 4-pustulatus, L., ab. *ruficollis*, Schils., and ab. *antemacularis*, Torre (*bipustulatus*, Schils.).—These two abs. were found with the typical form, which was very abundant in oyster mushrooms (*Pleurotus sapidus*) on elm trees, and also in a "fungus dump" in Windsor Forest on October 11th, 1927. In the former the thorax is red (I took this form at Axeman Street, Cambs. 24.VIII.21) instead of black as in the typical form. In the latter the two yellow apical spots are missing.

I also took a specimen in which only three spots were present; one of the basal spots was missing, and the other basal spot being very small. This was approaching the ab. *postmacularis*, Torre, in which the basal spots are wanting. There is also an aberration on the continent in which the whole elytra are black—ab. *erythrocephalus*, Er. Those two last named abs. have not yet been recorded for Britain. I intend to hunt for them this year.
